Tel: 1(800)388-4221 Fax: 1(917)591-2212 Email: info@nanocs.com

TECHNICAL DATA SHEET

Pyrene-PEG-NHS, MW 1000, 2000, 3400, 5000, 10k, 20k

Cat# PG2-NSPN-1k, 2k, 3k, 5k, 10k, 20k

Pyrene PEG NHS is one of Nanocs' chemical reactive fluorescent dyes that can easily react with primary amine groups derived from various biomolecules. Pyrene is a unique fluorescent dye that has exceptionally long excite-state lifetimes (>100 nanoseconds). The long excited-state life time of this dye makes it useful for time-resolved fluorescent immonoassays, probing oxygen in cells and lipid vesicles. NHS (N-hydroxysuccinimidyl ester) group, on the other hand, is a commonly used amine reactive functional group that can react quickly and specifically with primary amines at elevated pH. Reaction between NHS and amine allows rapid labeling of pyrene dye to proteins, antibodies, enzymes and many other molecules with high efficiency. Reaction of NHS and amine results a stable amide bond. PEG linker between Pyrene and NHS offers better water solubility, less steric hindrance and enhanced stability. Compared to other common fluorescent dyes, Nanocs' reactive fluorescent PEG dyes are brighter, more stable and easier to use. All our reactive fluorescent PEG dyes can be used directly in aqueous buffer without need adding any organic solvents.

Product Structure:

Product Specifications:

Molecular composition: Pyrene PEG NHS

Appearance (form): Solid or semi-solid depends on molecular weight of PEG

Appearance (color): Off-white to pale yellow

Ex/Em wavelength: 339/384 nm

Reactive toward: Primary amine (-NH₂)

Solubility: 10 mg/mL, clear in DMSO, water and chloroform

Storage Conditions:

Pyrene PEG NHS should be stored at -20 °C. Desiccate. Protect from light.

This product is for research use only.

The information given in this document is to the best of our knowledge accurate, but no warranty is expressed or implied. It is the user's responsibility to determine the suitability for their own use of the products described herein, and since conditions of use are beyond our control, we disclaim all liability with respect to the use of any material supplied by us. Nothing contained herein shall be construed as a recommendation to use any product or to practice any process in violation of any law or any government regulation.